Identifying the core competence as a key requirement for business model innovation – The case of Airlines as a service industry.

Sujith Nair[1], Hanna Paulose[2], Miguel Palacios[3], Javier Tafur[4]

[1, 3] Department of industrial engineering, business administration and statistics, School of industrial engineering, Universidad Politécnica de Madrid, UPM

[2]School of mechanical engineering, Mahatma Gandhi University, India

[4]School of aeronautical engineering and space, Universidad Politécnica de Madrid

Email: sujith.nair@alumnos.upm.es, aerosujith@yahoo.com, Miguel.palacios@upm.es, Javier.tafur@upm.es, molty001@gmail.com

Abstract

Core competencies form the basis of an organization's skills and the basic element of a successful strategic execution. Identifying and strengthening the core competencies enhances flexibility thereby strategically positioning a firm for responding to competition in the dynamic marketplace and can be the difference in quality among firms that follow the same business model. A correct understanding of the concept of business models, employing the right core competencies, organizing them effectively and building the business model around the competencies that are constantly gained and assimilated can result in enhanced business performance and thus having implications for firms that want to innovate their business models. Flexibility can be the firm's agility to shift focus in response to external factors such as changing markets, new technologies or competition and a firm's success can be gauged by the ability it displays in this transition. Although industry transformations generally emanate from technological changes, recent examples suggests they may also be due to the introduction of new business models and nowhere is it more relevant than in the airline industry. An analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania, that is done with core competence as the indicator reveals a picture of inconsistencies in the core competence strategy of certain airlines and the corresponding reduction in business performance. The performance variations are explained from a service oriented core competence strategy employed by airlines that ultimately enables them in having a flexible business model that not only increases business performance but also helps in reducing the uncertainties in the internal and external operating environments. This is more relevant in the case of airline industry, as the product (the air transportation of passengers) minus the service competence is all the same.

Keywords: Business model innovation, Core competence, Flexible business models, Airline industry

1. Introduction

Core competencies form the basis of an organization's skills and the basic element of a successful strategic execution. They represent the fundamental knowledge, abilities, and expertise of an organization and are what make individuals and organizations unique (Wood *et al*., 2009). The firm's ability to understand, manage and measure their core competencies is a critical factor in achieving strategic goals. Strategic planning that leverages this valuable information asset is more apt to deliver the intended outcomes for the business. An organization's competitive position is based on how the marketplace views the organization is relation to competitors. Without a clear definition of what you do as a core competency, it's nearly impossible to reach your desired position.

If identification of the core competencies of an airline is a complex process, the knotty relationship between competence strategy and flexibility of a system is rather difficult to interpret. However the results at the end are worth the painstaking efforts of analyzing the nuances of competence strategy. Because a core competency should provide long term differentiation of an organization if it is properly understood and articulated within the organization and to its partners (Koloupoulos, 2006).

2. The role of core competence in business model innovation

A business model is the underlying logic of a firm by which it creates value. In their definition of business models, Chesbrough and Rosenbloom (2002) emphasize the connections a business model provides between a firm's potential and the realization of economic value.

Business models have a profound influence on firm performance heterogeneity among intraindustry firms (Zott and Amit, 2008; Afuah and Tucci, 2001) as they "try to find new ways of doing business that will disrupt an industry's existing competitive rules, leading to the development of new business models" (Ireland *et al*., 2001). In turbulent and competitive environments, firms with higher flexibility perform better and the value of flexibility depends on factors of uncertainty in the competitive environment. Most business models follow a linear approach having a typology that shows the model at a given point in time. The more flexible the business model, the easier, it is for firms to enable their business models to assimilate and create value out of these ideas. The profitability of an operating model is constantly at risk due to technological innovations, regulatory changes, customer preferences, and competition (exogenous factors). The annual business model appraisals that firms make are out of place in the ever-evolving business scenario. There should be inherent qualities in the business model that makes it respond to uncertainty and diminishing firm performance by adapting to the factors that contribute to it. This means acquiring or changing the resources that made the model inefficient (Hamel, 1999). According to the resource-based view, firms in the same industry perform differently because, even in equilibrium, firms differ in terms of the resources and capabilities they control (Amit and Schoemaker, 1993; Barney, 1986; Dierickx and Cool, 1989; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984). This adjustment can be sustainable if the model is flexible enough to continuously assimilate and strengthen the acquired resources. Flexibility is the ability and capacity to reposition resources and functions of the organization in a manner consistent with the evolving strategy of management as they respond, proactively or reactively, to change in the environment (Koornhof, 2001). Flexibility requires the availability of resources and the effective synchronization of these limited variables to benefit from a new opportunity. This requisite translates in to the need for a firm to have the required competencies. The competencies that have been acquired have to be assimilated and strengthened.

A business model is the organization's 'core logic' for creating value for its customers and stakeholders (Linder and Cantrell, 2000). The business model was conceptualized as a set of factors ie the core logic, belief systems, cognitive environments and competencies that effectively interact, leading to value creation from resources. The components of the model reinforce each other. Identifying and strengthening the core competencies enhances flexibility thereby strategically positioning a firm for responding to competition in the dynamic marketplace. This will also explain the difference in quality among firms that follow the same business model. From a resource-based viewpoint (Garnsey *et al*., 2008), even though it has been argued that business models influence firm performance, the factors that affect the ability to create a business model with an inherent level of flexibility that will enable it to evolve, adding value and thus resulting in superior firm performance, have not yet been researched. In times of rapid change, uncertainty and turbulence, the relationships between the business organization and its environment change, and the organization should be aware and respond to this change in order to survive (Figure: 1). The functional logic that drives the organization should be flexible, timely, readily accessible, accurate, and compatible with other systems in both cross-functional and cross-organizational capacities.

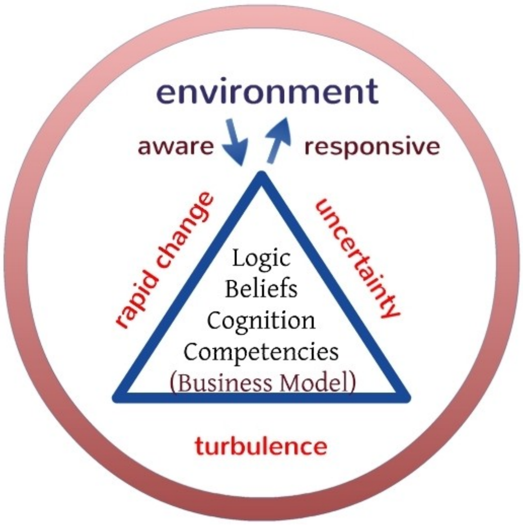

Figure 1. The dynamic environment of a business model

3. The case of business model innovation in the airline industry

Organizations across industry sectors are trying to become more flexible at both product and firm level often by leveraging flexible business models. New business models are emerging, ones in which competitive advantage is based upon managing processes that facilitate rapid and flexible responses to 'market' change, and ones in which new capabilities are based upon developing unique relationships with partners (suppliers, customers, employees, shareholders, government, and often with competitors (Walters and Newton, 2010). People skills and flexibility are becoming a fundamental resource. It is particularly so for a service oriented industry like the Airline Industry. This leads to a better product mix, exploration of new markets and customers. Franke, 2007 has called for new business models, while preserving core businesses with the model built around that core, and creating competitive advantage through innovation. But in the Airline industry, it is usually not possible to change overnight due to heavy investments made and orders pending. The flexibility has to be gained without compromising on the core competencies. An airline which insures itself against risk of making wrong predictions with respect to say the level of passenger demand in its routes will build a flexible network management system. But buying flexibility with respect to ones current products does not necessarily buy flexibility with respect to new product offerings, that may depend on nature of technology, regulations, radical competition, new business environments etc. A firm which is flexible in the operational sense is one which has built-in procedures which permit a high degree of variation in sequencing, scheduling, etc (Carlsson, 1989). Flexible individual business processes and methods will only lead to localized operational flexibility and will not lead to a firmwide philosophy of global flexibility. The airline industry has predominantly been operating on business models with less differentiation or innovation. In the days of a regulated industry or during the deregulations that happened around the world during the last two to three decades, the airline industry often had fixed and conservative notions of business models than many other industries. The current market scenarios of slow growth and complicated strategies make a fixed model unsustainable and unprofitable. All these factors result in the need for a business model that is inherently flexible and one that calls for less need for overnight overhauls of business models.

The Southwest Airlines which is a model for all new low cost airlines was the result of successful business model innovation (Teece, D.J. 2009). But such innovations have-- become common industry practice and are not sustainable without further innovation .Flexibility can be the firm's agility to shift focus in response to external factors such as changing markets, new technologies or competition. The success of a can be gauged by the ability it displays in this transition. But given the failure of many big airlines to start LCC, the mere transition without a sound business model behind it can be disastrous. The transition to an innovative and flexible business model requires airlines to identify or properly define their core competencies around which they can build their model. The failure of some airlines in the ¨airline within an airlines¨ concept such as United Airline s Shuttle and Ted, Song and Delta express from Delta Airlines, Metrojet from USAirways, BA Connect from British Airways etc shows a flawed business model with a flawed core competence strategy. Market share defended by slashing prices when costs are not slashed will impact profitability, and may not be sustainable, as Tretheway (2004) has argued. Trying to flex by differentiation cannot always provide the desired results if done without the right strategies. When there is little sharing of values, the “no-frills approach cannot be a wise move for established airlines unless this sector can be a viable strategic business unit in its own right (Kangis and O'Reilly, 2003). This can be explained partly by the fact that the cost structures for all the airlines are essentially the same even if some have advantages over operating costs.

Wensveen and Leick(2009) have argued that simplicity in business models coincide directly with flexibility. A leaner, streamlined strategy will provide more options and minimize complexities when airlines are forced to react to a changing operating environment or competition. But as Hazledine (2011) has shown, the business strategies employed by Air Canada and Air New Zealand shows that simplicity, which is the strength of the low-cost business model is also a potential source of weakness, that can be exploited by a legacy carrier determined to extract full value from its unique fixed assets. This is an effective case of proper identification and use of the core competencies of an airline from a business model point of view.

Operational efficiencies achieved from optimization must be weighed against the risks associated with complexity for a truly flexible business model to emerge Wensveen and Leick(2009).

4. Research methodology

In conducting this research, a literature survey on Business model innovation, flexibility, core competencies and firm performance in the airline industry was undertaken. The research is mainly of a deductive nature where examples are used to explain the nature of the various phases of uncertainty, flexibility and adaptability and to demonstrate the application of these in the business model framework using a core competence perspective. Perception-based measurements are chosen for analyzing the core competence of airlines. This is useful as some of the performance benefits from core competencies are intangible or qualitative in nature and are therefore not available as objective measures. Most of the data items are strategic in nature and are obtained from archival sources like strategy documents, regulatory agencies, trade magazines, airline websites, and governmental agencies. Perceptual measures have been widely used in almost all the behavioral oriented business and management disciplines. The core competence measurements are compared with the product and service quality ranking from Skytrax averaged over the last five years. The Skytrax ranking is widely accepted in the airline industry (Tsantoulis & Palmer, 2008), and can be used as an appropriate proxy for measuring airline service quality. The Skytrax rating indicates the service quality on a one-to-five scale, with five being the best evaluation and is available open source on the website. The Skytrax rating includes all parameters used in the SERVQUAL model of measuring service quality (Parasuraman, Zeithaml, & Berry, 1985), a model recently applied in the airline industry (Tiernan, Rhoades, & Waguespack, 2008). The assumption of constant quality has its limitations. But since the service level is presumably a reflection of the business model, stability over time is most likely to be the case for most airlines.

5. The core competencies in airline business models

Although industry transformations generally emanate from technological changes, recent examples suggest they may also be due to the introduction of new business models and nowhere is it more relevant than in the airline industry (Vlaar, Vries & Willenborg, 2005). In the past, different types of airline business models could be clearly separated from each other. However, according to Nair, Palacios and Ruiz (2010), this has changed in recent years partly due to the concentration process and partly due to the reaction caused by competitive pressure.

Core competence is the unique property of an organization or firm (Prahalad & Hamel, 1990). Core competency of an airline (Table 1) is largely dependent upon its industrial, social and cultural back ground. Nunes & Breen (2011) has commented on the problems faced by firms when their core markets begin to stagnate and they are reduced to managing to the limits of their existing business operations instead of identifying new business opportunities. According to them, firms fail to reinvent themselves not necessarily because they are bad at fixing what's broken, but because they wait much too long before repairing the deteriorating bulwarks of the firm.

The airline just like any other business makes up a system in which there are a set of functions, departments etc that should work in a synchronized manner. Strengthening core competencies will lead to profits for the airline only if the whole system functions in a way that nourishes the competencies. Without this framework, even if an airline strengthens the core competence or core strength, it will still be blocked from business performance by limiting factors like low integration, lack of will in implementation, failure to organize based on competencies etc. The business model approach when integrated with the proper core competency strategies will aid in overcoming these shortcomings that the airline may face. But for this, the business model itself should be aligned to the core competencies of the airline. The following section looks in to a scenario where the business model is organized around service orientation.

6. Competencies based on service orientation

The increasing importance and growth of services as a major global industry (Shugan, 1994) have made firms redefine their businesses with a service orientation. There is a consensus that economic growth, a higher disposable income and technological advances have contributed to the rapid growth of service-sector enterprises (Mattsson, 1995; Patterson, 1995), and have substantially increased their economic importance. According to Gronroos (2006), today firms compete on the basis of services, and not on the basis of physical products. The competitive advantage of services has become increasingly evident, as there is little to differentiate competing products from the customer's perspective. This is more relevant in the case of airline industry, as the product (the air transportation of passengers) minus the service competence is all the same with the technology, means of transportation (the aircrafts and airports), factors such as safety, maintenance, reservation systems etc remain almost the same across the industry with standards set by the aircraft manufacturers and regulating authorities in most cases. With the advent of the information age and the fast paced developments in technology, the dependence on human interaction to provide services has decreased. Technology has to be used as a means for providing service rather than a means in itself. Quality of technology innovation per se is of limited significance in today s highly competitive and evolving business environment. It is the value of these technological innovations as perceived by the customer that makes a product succeeds in the long run.

Service is not created just by the supplier and the customer but by a network of activities involving a host of stakeholders (Gummesson, 2008). This will enable the firm to realize its core competence, which is represented by the knowledge base, strengthened by the internal and external partnerships utilizing the technologies incorporated.

For service orientation to set in, the basic question of ¨what does the customer value¨ should be answered. Service orientation does not mean elaborate services, rather customer focused service. The service should be consistent and in line with customer needs and perceptions. Innovative service realignment by airlines should not mean a reduction in service orientation. Disruptive innovations with a customer focus do not mean a reduction in quality. It is important to make a distinction between those airlines for whom service is part of the overall offer and those for whom service is the offer as the latter exhibit particular characteristics that merit attention. Airlines have spent their focus on product development efforts like the latest flight entertainment systems or new kind of seats and at the same time ignoring the fact that customers are more concerned about the service oriented aspects of their travel which are more intangible. The airlines that take these service oriented factors while designing their business models, where every major issue, question or decision can be considered through the prism of this commitment to providing world-class customer service always excel in their business performance.

7. Need to identify required airline competencies

For a functioning flexible business model to evolve, the airline should have defined, strengthened and set priorities and operating models based on its core competencies. Core competence is the essential feature that determines the business model of an airline. Defining core competence would help us in combining the core activities with the non-essential activities within an airline in an efficient manner. And it’s this term that distinguish each airlines from the other. Why it is that Delta Express suffered a mere existence while Southwest has thrived the brutal environmental and social scenarios that they were subjected to. It was their approach to their core competencies, attitude and relationship with people that decided their future. Considering the above events, it is appropriate to define core competency in airline industry as the collective capabilities of an airline, to coordinate different resources so as to provide the best service in a cost effective way with the maximum benefit.

This study about airline business models and market trends necessitates the need to analyze the effect of these factors on the airlines' service and quality levels. The analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania is done with core competence as the indicator. This analysis focuses on the business model flexibility with the aspects of responsiveness to customer needs and market changes, efficiency of the operations and processes that lead to better services and generates growth. The importance that the airlines place on the service model and technology is analyzed.

Based on study of the perceived competencies of airlines, the data obtained can be used to measure and classify the core competencies of specific airlines. In Figure 2, a threefold classification is used, based on two dimensions, of any airline s competencies. The classification is based on the perceived core competencies by the airline and that has been identified consistently throughout in corporate strategy, implementation, and resource allocation for the past five years.

Along the Y-axis is the ranking of airlines on the basis of the delivered front-line Product and Service quality derived from the ranking listings of industry review bodies such as Skytrax.

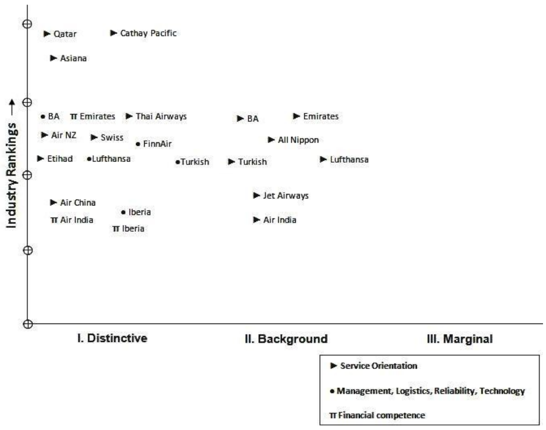

Figure 2: The core competencies vs Industry ranking of Airlines

The core competencies of the airlines are classified in to distinctive competencies, background competencies and marginal competencies. The core competencies of an airline and its cost-revenue interconnectedness are represented in Figure 3. The distinctive competencies should command both high shares of corporate resources and a strong revealed advantage as compared to the competition. The marginal competencies take only a small proportion of the corporate resources and without a strong competitive position. The background competencies are those which command high share of corporate resources, but do not contribute to an advantage over competition.

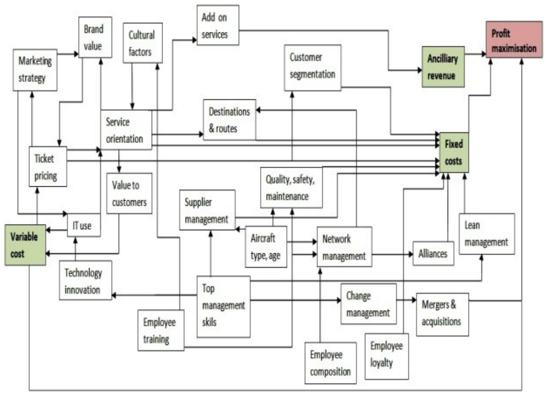

Figure 3: The core competencies of an airline

and its cost-revenue interconnectedness

The analysis (figure 2) shows that airlines which consider service orientation to be their primary distinctive competency consistently rank higher in industry airline rankings based on product and services. These are often airlines like Asiana Airlines or Qatar Airways which are relatively new. New airlines have an advantage over existing carriers in terms of implementing strategies to bring flexibility because they are devoid of legacy indebtedness or an out of date business model (Wensveen and Leick, 2009). Generally Asian airlines are relatively younger than their European counterparts. Asian airlines predominantly consider service as their distinctive core competence while most European airlines consider service to be their background core competence.

The airlines that consider their managerial skills, logistical capabilities, reliability in operations, adopting latest technologies etc do not rank high or often come in average score categories in industry rankings. Many European airlines like British Airways, Finn Air, Lufthansa etc consider implementation of latest technology, business knowledge, managerial skills of top management, flight availability, logistics, IT services etc to be their distinctive core competency. Technology act as a differentiating factor for a short span of time, but when all industry players start providing the same solutions, differences becomes vague. For example, advances like in-seat flight entertainment systems that were considered cutting edge in the 1990 s have become common industry practice now. The benefits of such progress are transitory and innovations are swiftly replicated by competitors and as market penetration increases, customers come to expect these innovations. Active engagement and continuous improvement are required to keep satisfying the customer expectations and if these factors are missing, the innovators will be left behind in a dynamic industry.

There is yet another group of airlines like Air India, Iberia (particularly state owned or recently privatized) that consider financial management and financial competence to be their distinctive competency. Change management, difficult in the most adaptive organizations, tends to be far more arduous in corporations that have government as the sole or majority shareholder (Doppelt, 2003). This is the primary reason for those airlines with traditional governmental share holding to be inefficient in providing a service oriented model.

One of the patterns that emerge from the analysis is the service and product quality difference between Asian and European airlines and the constraints placed by flexible models and proper core competency strategies. Asian airlines predominantly consider service as their distinctive core competence while European airlines consider technology and management skills as distinctive core competence.

To be flexible based on service orientation can be the way out for airlines which are facing stagnation due to limits of their business model as well as external factors. Examples can be found in the airline industry of such trends taking place particularly among the low cost airlines which are facing diminishing load factors and saturated markets. Easyjet which is primarily caters to the budget traveler is trying to transform its low cost business model by positioning itself to the business traveler by the introduction of practices like passenger loyalty schemes, priority boarding, flights to primary airports, flexible tickets whose date can be changed as often as desired from one week before until three weeks after the original date of travel etc. These kind of flexible practices based on service orientation are increasingly becoming evident in the airline industry.

8. Conclusion

The main aim of this paper has been to study the core competence strategies of airlines and how it defines their business model thereby affecting their business performance. The proper identification of core competencies can lead to innovations based on these competencies or by acquiring the ones that are deficient. The airline industry has traditionally experienced uncertainty throughout its existence and has come out of it through some innovative and flexible strategies employed by the successful among them. There have been many failures as exemplified and it shows us the need for the industry to take up flexible practices particularly when it comes to business models, to operate efficiently in the ever random industry scenario of the present. It is seen from the analysis of airlines that many of them do not understand the concept of choosing the right competencies to operate in the given environments. A correct understanding of the concept of business models, employing the right core competencies, organizing them effectively and building the business model around the competencies that are constantly gained and assimilated can result in enhanced business performance.

The airline competencies (Table 1) can be adapted, enhanced and continuously revamped if the firm has an overarching principle of flexibility built in to the basic logic of its existence. This can be achieved by a business model built on the basic norms of flexibility and evolution in a continuous cyclic manner. The findings show that it is possible for airlines to achieve sustained competitive advantage in highly uncertain environments by having an inherently flexible business model.

The analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania, that is done with core competence as the indicator reveals a picture of inconsistencies in the core competence strategy of certain airlines (particularly European full service carriers) and the corresponding reduction in business performance. For an airline, having competencies in business knowledge, flight reliability, IT enabled services, catering etc will not translate in to overall service quality unless these are based on the framework of a business model that has service orientation as a distinctive core competence. Thus it can be inferred that business model flexibility is ingrained in airlines that are service oriented and this is obtained by an efficient core competence strategy. Scope for further research involves the development of a model, for airlines to effectively identify the right competencies, finding the perfect mix of these competencies in the business model, the resource allocation required for maintaining these competencies etc.

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Table 1. Example of Airline competencies.

Example of Airline competencies.	
Product Differentiation (Customer satisfaction, Market share)	Eg: Air Newzeland, Air Canada. (Hazledine, 2011)
Financial Efficiency (Return on assets, productivity, Costing)	Eg: Ryan Air, Airasia (Barbot et al., 2008)
Innovation impact (R&D, New services, Revenue growth, market share)	Eg: AirAsia, Jetstar, BA Air Lingus (Wensveen, Leick, 2009)
Service focus (Responsiveness, Customer satisfaction, Market share, SG&A)	Eg: Singapore Airlines, Virgin Atlantic (Xinhui, 2008)

Annexure 1. Airline core competencies

Airline	**Core Competence**
South African Airlines	First mover advantage, Direct flights from South Africa, Best services
Qantas	World's safest airline, comprehensive experience and expertise
AirAsia	Cost Advantage, Operational effectiveness, Outstanding efficiency
Malaysian Airlines System	Airline operations, catering to engineering
Singapore Airlines	Skills of its top management at planning, marketing strategies and the interpersonal skills of its flight attendants
Asiana Airlines	Highest service standard and safety, maintain a sound financial footing
Qatar Airways	Highest quality of service in the air and on the ground, environment protection
Cathay Pacific	Good service, brand management - (via automotive marketing), supply chain management, highly coordinated ligistic system handled by outsourced firms
Etihad Airways	Unparalled levels of hospitality in the air, on the ground and on the website
Emirates	Low operating costs(Especially labour), cheap fuel, efficient hub - enables the passenger to get a low yield, bulk purchase of aircrafts, strong government with excellent credit ratings
Thai Airways	High standard on ground and in flight services and safety
Jet Airways	Safety, caring, integrity , fun and passion
Air India	Passenger airlines through Air India, low cost airlines through Air India Express, Air India Cargo
All Nippon Airways	Security,reliability
Air China	Committed service with care, innovative strategies and ideas
Air New Zealand	Employee Committed to the customer, energising work spcae
Turkish Airlines	Safety, reliability, product line, service quality
Lufthansa	Passenger airlines group,logistics, MRO, catering and IT Services.
Swiss Int'l Airlines	Inter cultural communication, quality customer service
British Airways	Global availability of flights(through alliances), quality of customer service
Finnair	latest technology,flexibility, business knoledge and managerial skills
Norwegian	Best management, successful adaptation of the low-cost model to the Scandinavian air travel market, low fares with high tech, strong emphasis on customer focused information technology
Iberia	Largest in spain, and frequent flights. best economic , environmental, and social practices,
South west	Low cost carriers, customer satisfaction..